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REMARKS

Claims 1 - 3 are pending in this application. By this Amendment, claims 7 - 16 are added. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

Claim Rejections

The Office Action rejects, under 35 USC § 103, claims 1 - 3 over Fulton (U.S. Patent No. 5,654,601) in view of Hendershot, Jr. (U.S. Patent No. 5,652,493).

These rejections are respectfully traversed.

Applicants assert that neither Fulton nor Hendershot, Jr. discloses or suggests a rotor of a cylindrical permanent magnet magnetized in the circumferential direction, as recited in independent claim 1.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the reference or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references, when combined, must teach or suggest all of the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure (MPEP 2142). The prior art must suggest the desirability of the claimed invention (MPEP 2143.01).

Both Hendershot, Jr. and Fulton disclose rotors having raised pole portions (see Hendershot, Jr. Figures 1-13 and Fulton Figures 1-5). Combination of the two references does not teach or provide any suggestion of desirability of cylindrical rotor, and therefore provides no motivation for the claimed invention.

Further, Hendershot, Jr. teaches away from using permanent magnets. Hendershot, Jr. describes a "keen interest in the class of brushless d.c. motors that do not use permanent magnets or windings in connection with the rotating member" (see column 1, lines 35 - 40). The field of

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the Hendershot, Jr. invention is that of brushless d.c. motors producing continuous rotational torque without the use of permanent magnets (see column 1, lines 10 - 13).

Thus, the cited references do not disclose or suggest a rotor of a cylindrical permanent magnet magnetized in the circumferential direction, as recited in independent claim 1.

Therefore, Applicants respectfully submit that independent claim 1 defines patentable subject matter. Claims 2 and 3 depend from independent claim 1 and therefore also define patentable subject matter.

Claim 2 is further limited to having the number of rotor poles set to $m \cdot (12n \pm 2)$, where n is an integer and ≥ 1 . Neither of the cited references discloses or suggests setting the number of rotor poles to $m \cdot (12n \pm 2)$, where n is an integer and ≥ 1 .

Claim 3 is further limited to having the number of rotor poles set to $m \cdot (12n \pm 2)$ where n is an integer and ≥ 2 . Neither of the cited references discloses or suggests setting the number of rotor poles to $m \cdot (12n \pm 2)$, where n is an integer and ≥ 2 .

Accordingly, Applicant respectfully requests the withdrawal of the rejection of claims 1 - 3 under 35 USC § 103. Because generic claim 1 is believed to define patentable subject matter, Applicant respectfully requests the withdrawal of the restriction requirement and allowance of original claims 4 - 6.

CONCLUSION

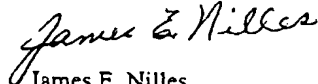
Based on the foregoing amendments and remarks, Applicants respectfully submit this application is in condition for allowance. Favorable consideration and prompt allowance of claims 1 - 16 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

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The Commissioner is hereby authorized to deduct any additional fees arising as a result of this Amendment or any other communication from, or to credit any overpayments to, Deposit Account No. 14-1080.

Respectfully submitted,


James E. Nilles
Registration No. 16,663

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NILLES & NILLES, S.C.
U.S. Bank Center, Suite 2000
777 East Wisconsin Avenue
Milwaukee, WI 53202
Telephone: (414) 276-0977
Facsimile: (414) 276-0982

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